

CASE III.—Neusser.⁴ A female patient, aged thirty-seven years, observed a swelling in the abdomen above the umbilicus. In addition there were numerous digestive symptoms, loss of appetite, green stools and pain after food. A cough appeared and was finally followed by the expectoration of pus. The patient died and at autopsy a perforated gastric ulcer was found, leading to a pus cavity in the lungs.

CASE IV.—Nowack.⁵ A maid, aged nineteen years, had frequently been affected with gastric disorder. She was suddenly seized with sharp pain in the lower abdomen. The pain increased and the abdomen became swollen. The patient began to vomit and became very weak. The pain in the region of the liver increased; the pulse became rapid and weak and the temperature subnormal. A perforation of the stomach was diagnosed and an operation performed. From one to two liters of fibrinous fluid were found in the abdominal cavity. The patient died and at autopsy an abscess of the lung was revealed, produced by the perforated gastric ulcer.

LUMBAR PUNCTURE AS A FACTOR IN THE CAUSATION OF MENINGITIS.

BY PAUL WEGEFORTH, M.D.,

CAPTAIN, U. S. A.,

AND

JOSEPH R. LATHAM, M.D.,

FIRST LIEUTENANT, U. S. A.

(From Base Hospital, Camp Jackson, S. C., and the Army Neurosurgical Laboratory, Johns Hopkins Medical School, Baltimore, Maryland.)

RECENT studies on experimental meningitis in the Army Neurosurgical Laboratory^a have demonstrated that the release of cerebrospinal fluid during certain artificial septicemias in animals is followed by a localization of the infection within the meninges. The method employed in these investigations consisted in giving an animal an intravenous injection of a suitable dose of an organism whose pathogenicity for the meninges was known to be high. Following this, spinal fluid was withdrawn during the height of the septicemia, either by lumbar or cistern puncture.^b Animals subjected to this procedure invariably developed a fatal meningitis. Control animals inoculated intravenously with similar or larger doses of the same organisms, and not subjected to lumbar or cistern puncture, remained normal and showed subsequently no evidences

⁴ Wien. med. Wchnschr., 1884.

⁵ Schmidt's Jahrb., 1891, Nos. 9 and 10.

29. Penna, J.: *Semana méd.*, 1913, xx, 229.
30. Quinke, H.: *Deutsch. med. Wehnschr.*, 1905, xxxi, 1825.
31. Robinson, G. C.: *Am. Jour. Med. Sc.*, 1906, exxxi, 693.
32. Robson and Conld: *Jour. Royal Naval Med. Serv.*, 1915, i, 255.
33. Saecquepee, M. E.: *Bull. et mém. Soc. méd. des hôp. de Paris*, 1911, xxxi, 325.
34. Sainton et Maille: *Bull. et mém. Soc. méd. des hôp. de Paris*, 1915, xxxix, 299.
35. Sladen, F. J.: *Johns Hopkins Hosp. Rep.*, 1910, xv, 397.
36. Solomon, H.: *Berl. klin. Wehnschr.*, 1902, xxxix, 1945.
37. Sophian, A.: *Epidemie Cerebrospinal Meningitis*, St. Louis, 1913.
38. Vincent, H.: *Bull. et mém. Soc. méd. des hôp. de Paris*, 1909, xxvii, 899.
39. Voisin, R.: *Thèse de Paris*, 1904.
40. Voisin und Laignet-Levastine: *Arch. de méd. expér.*, 1903, p. 297.
41. Warfield and Walker: *Bull. Ayer Clin. Lab.*, 1903, i, 81.
42. Weed, L. H., Wegeforth, P., Ayer, J. B., and Felton, L. D.: *Jour. Am. Med. Assn.*, 1919, lxxii, 199.
43. Wegeforth, P., Ayer, J. B., and Essick, C. R.: *Am. Jour. Med. Sc.*, 1919.
44. Westenhoefter, M.: *Klin. Jahrbuch*, 1909, xv, 957.
45. Weichselbaum und Ghon: *Wien. klin. Wehnschr.*, 1905, xviii, 625.
46. Worcester, Drought and Kennedy: *Lancet*, 1917, ii, 714.

RELATIONSHIP OF THE STREPTOCOCCUS HEMOLYTICUS TO "INFLUENZA" AND PNEUMONIA.¹

BY CAPTAIN M. B. LEVIN, M.C.,

FIRST LIEUT. D. A. GOODMAN, M.C.,

AND

SECOND LIEUT. F. J. PANCOAST, S.C.,

U. S. ARMY GENERAL HOSPITAL NO. 2, FORT McHENRY, MARYLAND.

IN reviewing the laboratory work of all cases of "influenza" and pneumonia, many of which were admitted with the diagnosis of influenza, as diagnosed at our hospital from September 1, 1918, to October 20, 1918, our attention was called to the very common association of *Streptococcus hemolyticus* with these conditions, and an attempt was made to summarize the laboratory work on all such cases from September 1, 1918, to January 1, 1919. We also referred to previous reports to the Surgeon-General's Office dated July 20, 1918, and October 19, 1918.

No attempt was made to try to differentiate hemolytic streptococci on other sugars than glucose and lactose and in the results we referred to the organisms only as their hemolytic action on blood was concerned.

A bacteriological summary of 554 sputa examined showed a great predominance of *Streptococcus hemolyticus* over other organisms.

¹ Read before the Weekly Staff Meeting at U. S. A. General Hospital No. 2, Fort McHenry, Maryland, February 5, 1919.